

LISTING OF THE CLAIMS

Please cancel Claim 1 and add the following new Claims 2-17:

1. **(Cancelled)**
2. **(New)** A medical connector, comprising:
 - a valve comprising proximal and distal ends, and a cavity therein;
 - a rigid member located within the cavity;
 - a flexible member substantially surrounding the rigid member, at least a portion of the flexible member being at or near the proximal end of the valve;
 - a tubular main body attached to and in fluid communication with the distal end of the medical valve; and
 - a tubular branch in fluid communication with the tubular main body.
3. **(New)** The connector of Claim 2, wherein the rigid member and the tubular main body are unitary.
4. **(New)** The connector of Claim 2, wherein the connector comprises a transparent material.
5. **(New)** The connector of Claim 4, wherein the connector comprises a rigid plastic.
6. **(New)** A medical connector for controlling the flow of fluid from a plurality of fluid sources, the connector comprising:
 - a valve comprising an opening adapted to receive a first fluid source and a wall structure defining an internal cavity, the cavity comprising a neck portion in fluid communication with the opening and a main portion with a larger internal diameter than the neck portion; and
 - a flexible element positioned in the cavity movable between an uncompressed position in which a portion of the flexible element bears against the wall structure near the opening and obstructs fluid flow through the valve and a compressed position in which fluid flow is permitted through the valve, the flexible element comprising a flexible wall with an inner surface and an outer surface, the flexible element in the uncompressed position comprising a first external diameter near the opening, a second external diameter in the neck portion and a third external diameter in the main portion, the second diameter being smaller than the first diameter and the third diameter;
 - a tubular main body in fluid communication with the valve; and

a tubular branch adapted to receive a second fluid source and adapted to direct fluid from the second fluid source into the tubular main body.

7. (New) The connector of 6, further comprising a rigid member located within the flexible element.

8. (New) The connector of 7, wherein the rigid member comprises a spike.

9. (New) The connector of 7, wherein the rigid member and the second tubular body are integrally formed.

10. (New) The connector of Claim 6, wherein the connector comprises a transparent material.

11. (New) The connector of Claim 10, wherein the connector comprises a rigid plastic.

12. (New) The connector of Claim 11, wherein an end of the flexible element near the opening of the body in its uncompressed position is substantially flat.

13. (New) The connector of Claim 12, wherein the flexible element in the uncompressed position has an end substantially flush with the opening of the cavity of the valve.

14. (New) The valve of Claim 13, wherein the medical valve further comprises a support member enabling the valve to be removably attached to the first fluid source.

15. (New) The valve of Claim 7 wherein the rigid member is positioned within the flexible element to assist in supporting the flexible element and to assist in maintaining the flexible element along an axial centerline of the cavity when the flexible element moves between the uncompressed position and the compressed position.

16. (New) The valve of Claim 13, wherein the flexible element substantially completely fills the opening in its uncompressed position.

17. (New) A medical connector for controlling the flow of fluid from a plurality of fluid sources, the medical connector comprising:

a valve, comprising:

a housing with proximal and distal ends, and an opening at the proximal end adapted to receive a fluid source, and a wall structure defining an internal cavity, the cavity comprising a neck portion in fluid communication with the opening and a main portion with a larger internal diameter than the neck portion; and

a flexible element positioned in the cavity movable between an uncompressed position in which a portion of the flexible element bears against the wall structure

Appl. No. : 10/607,946
Filed : June 27, 2003

near the opening and obstructs fluid flow through the valve and a compressed position in which fluid flow is permitted through the valve, the flexible element comprising a flexible wall with an inner surface and an outer surface, the flexible element in the uncompressed position comprising a first external diameter near the opening, a second external diameter in the neck portion and a third external diameter in the main portion, the second diameter being smaller than the first diameter and the third diameter, and at least a portion of the outer surface of the wall of the flexible element between the second diameter and the third diameter being tapered;

a tubular body attached to the distal end of the valve, the tubular body having a longitudinal axis;

a tubular branch having a longitudinal axis, the tubular branch being adapted to receive a first fluid source and the tubular branch being in fluid communication with the tubular body;

wherein the longitudinal axes of the tubular body and tubular branch form an acute angle.